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ABSTRACT

This report contains research findings on student achievement and retention at New York City alternative high schools serving dropouts and potential dropouts. After a summary and introduction, statistics are presented which reveal that alternative schools facilitate positive changes in student performance. Next, reasons for students' dropping out are discussed, and factors which influence the holding power of alternative schools are described. Differences in students' academic preparedness and the types of school programs are cited as major reasons for the fact that some schools show a higher rate of student retention. A summary of major findings is presented, with particular focus on the dropout problem. Finally, a model for establishing alternative schools (or refining existing ones) is described, and this study's principal recommendations are outlined. Methodological procedures used to collect and analyze the data contained in this report are detailed in five appendices, including a three-page interview format. (KH)

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More Lessons from Alternative High Schools

A REPORT OF THE PUBLIC EDUCATION ASSOCIATION

by Eileen Foley, Project Director
& Peggy Crull, Ph.D., Research Associate

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EDUCATING THE AT-RISK ADOLESCENT

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ACKNOWLEDGEMENTS

This study is a collaborative effort of many individuals. It owes its existence to the willingness of the alternative high school principals to open their schools and indeed themselves to intense scrutiny with the simple hope that their courage would be rewarded by a better system-wide understanding and acceptance of their work.

The several drafts through which this document passed before publication were carefully read, commented upon, and restructured by the PEA research committee. We are especially grateful to several members of the committee: PEA President Mary Ellen Fahs, Executive Director, Jeanne Silver Frankl, and Director of Information Services, Judith Baum, Professor Joseph C. Grannis, Ph.D,of Teachers College and John Bartolomeo,Ph.D., of Clark, Martire and Bartolomeo. They offered their research expertise and critical skills to the enterprise and sharpened our understanding of the data.

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SUMMARY

While improvements in the city's public schools have been observed and widely hailed, the dropout rate remains an astonishing 45%. Prompted by the seriousness and persistence of this problem, the Public Education Association has been, for several years, studying the city's alternative high schools, the most systematic Board of Education intervention to combat early school leaving to date. Established in the 1970's the alternative schools have philosophies and programs designed to create a compelling social and academic atmosphere for students alienated from traditional schools.

In an effort to gauge the success of alternative schools and identify the elements in their programs which contribute to success, PEA has conducted a two-phased study. Launched in the fall of 1981, the first phase of the research compared the performance (attendance and credit accumulation) after one semester of a group of more than 300 alternative school students with their performance in their previous schools. Quantitative analyses showed that students in the study sample decreased their absences by nearly 40% and earned 60% more credits in the alternative school, although it appeared that many were still not earning enough credits to graduate. Open-ended interviews with a sub-group of those students and their teachers and principals, as well as on-site observations, provided a detailed account of how these schools were able to work

effectively with dropouts and potential dropouts.

Encouraged by first semester findings, the second phase of the study was begun in 1983 as several more semesters of data were required to know if the initial burst of improvement we had measured would last and if it could reasonably be attributed to the schools' interventions. Further, following students in their alternative school careers would enable us to uncover factors which led to dropping out even after this radical intervention.

The second phase of the investigation of alternative school students involved collecting three additional semesters of data and resulted in a set of findings which confirmed our initial confidence in the school programs, provided insight into the motives for dropping out of alternative school, and gave clues to the additional interventions needed to enable at-risk youngsters to stay in school.

LONG-TERM EFFECTIVENESS OF THE ALTERNATIVE SCHOOLS

In most of the alternative schools, students were performing better than they had in their previous schools and the improvements in both attendance and credit accumulation lasted for the four semesters covered by this study. The improvements were most stable in City-As-School, Redirection and Satellite Academy. Among the other schools (except Middle College) the four semester comparison usually showed a decrease in absences and an increase in credits earned. Although a number of the improvements were not statistically significant, the frequency and consistency with which the averages improved increased our conviction that the changes were meaningful. The fact that students at Middle College were absent significantly more often and earned some-

what fewer credits then they had in their previous schools was interpreted in light of several facts. They are the only group in this study that is moving directly from junior high to high school, a time when attendance and credit accumulation tend to decrease. In addition, the Middle College students, though flagged by their guidance counselors as potential dropouts, start with relatively good attendance records and more credits compared to the other students in the sample. Finally, students are, in fact, attending and earning credits at an acceptable rate at Middle College. One tends to conclude, therefore, that in absolute terms Middle College is quite successfully stemming the tide of early school leaving.

Not only are students in alternative schools showing up at school more often and accumulating more credits than they previously were, they are generally persisting towards graduation. The overall dropout rate did not exceed 40%. For a group of schools serving students who had already dropped out or were on the verge of it, this was an encouraging finding.

While most of the schools had graduated or were holding most of their students during the period covered by this study, it is sobering that in only four of the eight schools does it appear that students earning the average number of credits for that school will graduate by the age of 21. The schools where the average student will apparently be unable to graduate have taken the first step towards meeting at-risk youngsters' needs -- they are keeping them connected to an academic setting. However, the schools must find ways to improve

student performance and rate of credit accumulation to enable more of their youngsters to graduate.

FACTORS ASSOCIATED WITH DROPPING OUT

While students who drop out of alternative schools do not have significantly lower reading and math scores then persisters, dropouts are older and have distinctly poorer attendance and achievement records throughout their career in and before the alternative school. Indeed, alternative school dropouts do negligibly better in these schools than they had in their former settings. Teachers and administrators need to be alert to these facts and provide additional incentives for students who do not make immediate academic progress. The incentives should be those that encourage closer social bonds to develop between the youngsters and others in the school and those that encourage academic success, such as offering students highly motivating teachers and courses and more frequent rewards.

The interviews that were conducted with a small group of students from the three schools (City-As-School, Satellite Academy and High School Redirection) helped to pinpoint the kinds of intervention which should be attempted. The most salient difference between persisters' and dropouts' descriptions of their alternative school experience was in the quality of their social relations. None of the dropouts (or transfers) from Redirection or Satellite made positive comments about other students. Some students who left City-As-School made positive remarks about their peers, but all of the negative ones were made by dropouts or transfers. Adding to the sense that the quality of

social relations is worse for dropouts was the finding that none of them in any of the case study schools participated in extra-curricular activities. Isolating them further was the fact that those dropouts who worked, worked full-time, leaving little time for school-related friendship or activities.

Only the most academically disadvantaged dropouts implied that they left the alternative school for academic reasons. At City-As-School and Satellite students viewed the ordinary business of life -- getting married, having children, making money -- as the impetus for their leaving school. At Redirection, a school which enrolls large numbers of academically handicapped students, students more frequently mentioned not liking the work or having difficulty with it.

Although they expected them to graduate, according to dropouts' own reports, their parents were not fully aware of their educational progress. This was especially true of students who were most disadvantaged.

From these student reports and our quantitative analysis we can posit the dynamics which eventually result in leaving an alternative high school. There is a very close association between persistence and credits in an alternative school. Apparently, at least part of the motivation for dropping out comes from academic failure. Another dynamic is the failure to connect with the school in a personal way. A student who has already shown a predisposition to drop out can be attending school and even earning sufficient credits and still become

uninterested in staying in school if there are not enough rewarding personal interactions to draw him or her into the school community. A student's likelihood of dropping out is multiplied if he or she has the additional burden of being older, finding the work too difficult and the number of credits needed to graduate too great. Finally, if parents are not alert to the student's needs and progress, he or she will be even less likely to stay in school.

FACTORS WHICH INFLUENCE THE HOLDING POWER OF ALTERNATIVE SCHOOLS

Given the finding that certain entering characteristics of alternative school students are associated with later dropping out, one would naturally hypothesize that schools which enroll the largest numbers of students with those characteristics have the highest attrition rate. While this is generally true, Satellite Academy's exceptionally high attendance, credit accumulation and graduation rate stands in counter-distinction. The school performs more effectively than institutions with less at-risk youngsters. What accounts for the particular effectiveness of Satellite? Rapid credit accumulation is highly associated with performance and Satellite students do obtain many credits per semester, but City-As-School students also accumulate credits rapidly and they do not persist in as large numbers. Interviews suggest that the City-As-School external learning program, while highly satisfying to students, mitigates against the peer and student/teacher relationships which also exert holding power.

LESSONS FROM PHASES I AND II OF THE ALTERNATIVE SCHOOL STUDY

The initial phase of PEA's investigation of alternative schools resulted in a sense that these schools were succeeding with potential and actual dropouts where others had failed. More important, a model of effective alternative education was constructed based on extensive interaction with the school communities. The follow-up phase has confirmed our confidence in the effectiveness of the schools and provided refinements for the model. However, for over-age students (17 years plus) in the lower range of academic preparedness, the model is not sufficient to insure graduation, although it does improve student performance.

THE MODEL

At the heart of the model gleaned from observations and interviews in alternative schools is the interrelationship between school climate and academic programming -- a relationship that rebuts the concern that alternative schools sacrifice academics for "good vibes." The strength of the schools seems to lie in their well-focused academic programs and their capacity to engage students and teachers in a dialogue that reaches beyond the formality of roles and fosters creative human relationships. In the best schools these relationships are not set apart or allowed simply to dangle along side the instructional and organizational features of the school. They inform the curriculum

and structure of the school and clear the way for teaching and learning.

The fostering of exemplary teaching-learning relationships is the outgrowth of several features of the most effective alternative schools.

1. They have well-defined student populations; they know what their students need and program accordingly.

2. They have principals who are strong academic leaders and work with faculty to ground curriculum in the reality of students' lives, their intellectual needs, and school system requirements.

3. Teachers' roles are diversified to allow for increased managerial participation, time to develop curriculum cooperatively, and for opportunities to counsel students. Counseling enhances teachers' sensitivity to students' needs while administrative authority increases the likelihood that this understanding will result in better programming.

4. Teachers develop curriculum together in an ongoing way which continually evolves more appropriate responses to students'academic needs.

5. Partial course credit, fast-paced cycles, and learning contracts enhance students' opportunities to succeed academically.

6. Alert participation is encouraged by inviting students to take part in regular classroom discussions, make decisions regarding the courses they will take, and learn through doing.

7. Students are involved in activities critical to school goals, such as student admissions and course evaluation.

8. A few commonly agreed-upon, frequently-discussed school rules establish clear standards for conduct, and a highly

structured support system enables students to live within those rules.

9. Small school size, the factor most principals and teachers thought critical in their ability to reach students, encourages communication and a sense of belonging and limits the bureaucratic obstacles to leadership and programming.

REFINEMENTS IN THE MODEL

Among the five schools -- City-As-School, Middle College, Park East, West Side, and Satellite Academy -- which work with students who are generally of high school age, Satellite Academy appears to elicit the most dramatic improvements in attendance, credit accumulation, and persistence. It is also, not surprisingly, the school which most fully utilizes the various components of the model just articulated. The Chambers Street Academy of Satellite which this study featured is the smallest of all the academic units studied. It is a highly structured, student-centered, participatory community focused on high quality teaching and academic learning. As befits such an institution, the principal is a decidly strong academic leader and a skillful facilitator of group interactions. Teachers roles are highly differentiated to allow for increased participation in the management of this school, for more time to counsel students, and for more time to plan curriculum cooperatively. Students' roles are similarly diversified to allow for participation in activities -- like student admissions and course evaluation -- which are critical to the life of the school. The

atmosphere is friendly, engaging, relaxed and yet decidedly ordered. At the heart of the success of Satellite Academy is a philosophy which emphasizes academic learning and emotional growth and the development of school structures and processes which support those goals. A further elaboration of that model is included in the text.

INTERVENTIONS FOR THE LEAST-PREPARED STUDENT

Each of the three schools which serve the most academically disadvantaged youngsters -- Pacific, Redirection, and Bronx Regional -- improve student performance on one or more of the outcome measures. In absolute terms, however, most of their youngsters continue to perform very poorly. In any one cohort few ultimately graduate. Seeing this, the administrators of these schools faced and continue to face a difficult decision: change their clientele (that is, admit students who are more likely to be successful) or change their mission. In compassion for the many older students with few credits who come to them, these principals have chosen the second option and altered their goal from preparing students explicitly for the diploma to helping youngsters in jeopardy. Interviews with students suggest that this mission has had a complicating and perhaps adverse impact on curriculum since teachers' academic expectations waiver when students are not pursuing explicitly academic goals.

Essentially this means that to serve their youngsters more effectively alternative schools with extremely academically dis-

advantaged and over-age students must expand their intervention strategy, officially change their goals, or work with younger students more likely to graduate. As this study points out, early intervention is possible. The example of Middle College, which recruits junior high students and appears to be moving them toward graduation, shows that this strategy works with students with moderate academic deficits. Whether post-junior high school is soon enough to intervene for those who are most deficient is a matter for further research.

Despite its importance, earlier intervention would provide little comfort for older currently enrolled students. It is not apparent yet how best to serve these youngsters. Considerable research and program modelling needs to be done to suggest an answer to this persistent problem.

REWARD AND CRITICAL FIRST SEMESTERS

One must conclude, for many youngsters -- especially former dropouts -- alternative schools are too little too late. The one ray of hope which shines through these rather dark findings about the older underachiever is the fact that these youngsters, like all students, respond to reward. For the high-risk student as for others, reward or credit accumulation is highly associated with persistence, and failure or lack of credit is highly associated with dropping out. This suggests the critical importance of stimulating student achievement particularly in the early semesters when students

are developing patterns of performance. Assigning the most at-risk youngsters to exciting and appropriate classes with expert teachers, and developing a credit policy which regularly rewards these students for learning and perhaps for learning outside the classroom (life experience) is a strategy which would be worth attempting in a systematic way.

RECOMMENDATIONS

Alternative schools have proven their value; they should be nurtured and their experience considered as the school system addresses the continuing problem of failure and dropping out.

-- Traditional high schools which serve students whose academic and social profiles resemble those of dropouts should be redesigned with reference to the alternative school model.
-- Given the importance of first semester performance, special efforts should be made in all schools to place entering students, particularly those most at-risk, in especially motivating classes with expert teachers.
-- Efforts should be made to engage those students and their parents in activities which are critical to the furthering of the goals of the school.

-- Alternative schools appropriate for younger students should be available immediately following junior high school.

-- The school system should redouble its efforts to bring alternative schools' facilities and resources, particularly their vocational training capabilities, to par with other city schools.

-- Alternative schools which have not realized their full potential should be brought, through a concerted program of staff development based on the principles suggested herein, to the level of excellence which characterizes their best efforts.

-- A strategic analysis of the various programs serving over-age, severely-underachieving students is required in order to develop program models with greater capability for seeing those students through to the completion of the diploma. Alternative schools which serve the most at-risk are the obvious testing grounds for such programs and should be used as laboratories for the school system.

I. INTRODUCTION

For a number of years, the Public Education Association has been concerned with the dropout problem. This concern, spurred by the staggering 45% dropout rate in New York City secondary schools for the past eight years, has led PEA to pay special attention to one apparently promising solution to this problem -- the alternative public high schools. Organized in the 1970's, the alternative schools have philosophies and programs designed to create a more compelling social and academic atmosphere for students alienated from traditional schools. There are currently eleven alternative high schools.

THE INITIAL RESEARCH FINDINGS

In an effort to gauge the success of alternative schools and identify the elements of their programs which contribute to that success, PEA designed a two-phased study. Launched in the fall of 1981, the first phase of the research compared the first semester performance (attendance and credit accumulation) of a group of more than 300 students in eight different alternative high schools with their performance in their previous schools. Quantitative analyses showed that students in the study sample decreased their absences by nearly 40% and earned 60% more credits in the alternative school, although it appeared that many were still not earning enough credits to graduate. Open-ended interviews with a sample of those students and their teachers and principals, as well as on-site observations,

provided a detailed account of how these schools were able to work effectively with dropouts and potential dropouts. The interviews and observations helped identify nine elements found in different combinations in the individual schools which the school communities (and the researchers) felt made the improvements possible. They are:

-- small school size.

-- a clear academic mission with well-defined, obtainable academic goals.

-- strong academic leadership.

-- an interactive curriculum process which continuously evolves more appropriate responses to students' needs and results in courses grounded in students' lives and intellectual needs.

-- diversified roles for teachers that allow for increased managerial participation and opportunities to counsel students and plan curriculum cooperatively.

-- partial course credit, fast-paced cycles, and learning contracts which establish a clear relationship between effort and reward and enhance opportunities for academic success.

-- a classroom which encourages "wide awakeness" by inviting students to think, participate in class discussions, make decisions regarding the courses they take, and learn through doing.

-- student participation in activities such as peer counseling, student admissions, and tutoring.

-- a few commonly agreed-upon, frequently-discussed school rules establishing standards for conduct and a structured support system enabling students to live within those rules.

The outcomes of the first phase of the study were reported in detail in "Towards School Improvement: Lessons from Alternative High Schools." (Foley & McConnaughy, 1982).

In the follow-up phase researchers gathered attendance and credit data for three additional semesters and interviewed students at the end of that time. The results assured us that the changes observed in the initial phase were enduring and deepened our understanding of the structure and dynamics of successful alternative schools. The present study is a report of the follow-up phase. In addition, it is an attempt to draw together the lessons from both phases of the research into coherent recommendations for improving alternative schools and traditional public high schools.

PROFILES OF THE ALTERNATIVE SCHOOLS

A good portion of the initial phase of the research was devoted to describing and comparing the philosophies and student profiles of the eight alternative schools included in our study. A brief review of that information will orient the reader to follow-up questions and results.

The alternative schools were established by the Board of Education to provide options for the many students perceived to be alienated from the traditional schools. Many such youngsters officially or unofficially drop out of school before becoming enrolled in the alternative setting. Others are steered to an alternative school

because they are excessively truant or simply dissatisfied in their previous high school. The sample of over 300 students selected for the 1981 study and followed up in the present study, fell into the following categories:

-- 20% were dropouts.

-- 31% were truants; that is, they had been absent more than 30 times per semester for two semesters in their previous school.

-- 48% transferred because they were dissatisfied.

Students entered most of the alternative schools with a rate of credit accumulation in their former high schools far below what would be necessary for graduation in the usual eight semesters of high school. In fact, it did not appear that most alternative school entrants would graduate by the age of 21 when they would be forced to leave school. (See Foley & McConnaughy, 1982, pp.56-68 for school by school admission status and prior credits of students).

While all of the alternative schools serve students who have histories of poor attendance and inadequate achievement, the schools are quite dissimilar in other respects. There are differences in the male/female ratio, the age of students, their previous behavior problems and levels of prior attendance, achievement, and ability. These differences are illustrated by comparing the three schools selected for case studies in the first stage of the research:

-- City-As-School students are evenly divided between sexes and are primarily transfers from other schools.

They range from 14 to 20 years old and have minimal disciplinary entries on their records. The number of credits these students bring varies from zero to nearly 30, but it is generally below average for their age. They generally read on or above their grade level.

-- Redirection students are at the opposite end of the spectrum (from City-As-School students) on almost every measure except that both schools admit equal numbers of boys and girls. Almost one quarter of the entrants are over 18 and one out of six have had serious disciplinary problems. Half enter with no credits from their previous year of school but the range of credit accumulation is broad. Their median reading scores average more than three years below the expected level.

-- Satellite's student profile falls somewhere between the other two case study schools. There are twice as many females as males, primarily truants and dropouts between the ages of 14 and 20. These students generally do not have serious disciplinary histories: only three percent of the sample had been suspended. The number of credits with which they enter is similar to City-As-School, but most are about one and one-half years below their expected reading level.

The remaining five schools studied differ in many ways from the case study schools and from each other, but there are similari-

ties. Middle College is in some ways similar to City-As-School in that its students are all transfers with close-to-acceptable rates of credit accumulation. However, they read one year or so below their expected level and are referred to Middle College by their junior high schools as students who might drop out based on their behavior and attitudes as well as previous school performance. Like Redirection, Pacific and Bronx Regional attract older students with histories of disciplinary problems, truancy and dropping out and acute academic deficiencies. Unlike Redirection, Bronx Regional has twice as many males as females. Park East and West Side have student bodies very much like that of Satellite except that Park East has an almost equal number of males and females and West Side has almost twice as many males as females. Figure 1 (p.7) outlines the program of each of the schools.

QUESTIONS FOR THE SECOND PHASE

The first study presented information on student performance after one semester in the alternative schools. The improvements noted provided initial validation of the schools, but several more semesters of data were required to know if the initial burst of improvement identified would last and if it could reasonably be attributed to the schools' interventions.[1] Further, following students in their alternative school careers would enable us to find out what

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[1] It was possible, for instance, that the students improved their performance simply due to the novelty of the situation, which would wear off. Or, that attention of any kind brought a brief increase in performance (Hawthorne effect).

FIGURE 1

PROFILE OF THE ALTERNATIVE SCHOOLS[+]

School	Focus
City-As-School	Ninety percent of students' academic work done through out-of-school internships.
High School Redirection	Comprehensive services for older, often non-literate dropouts.
Satellite Academy	Emphasis on student participation and faculty governance, basic skills and critical thinking.
Bronx Regional	Non-coercive approach to behavior modification, emphasis on basic skills and social adjustment of students.
Middle College	High school instruction on college campus with mandatory out-of-school internships. Focus is dropout prevention.
Pacific	Comprehensive services for older, often non-literate dropouts.
Park East	Currently more traditional in structure than other alternative schools. Focus on basics, career education and college preparation.
West Side	Counseling orientation to help students overcome resistance to learning.

[+] There were 10 alternative schools when this study was designed. Harlem Prep closed early in the study, and many immigrant students at Lower East Side Prep lacked necessary records for comparison, so the overall study included only eight schools.

factors led to dropping out even after this radical intervention.

In pursuit of this information, researchers collected three more semesters' attendance and credit accumulation data, noting who persisted, transferred, or dropped out during the semesters we examined. Students were then interviewed to find out the reasons they persisted in or left school. This made it possible to answer several questions about alternative settings:

-- Do the initial improvements hold up over time?

-- Do the schools graduate most students or do the students drop out or earn too few credits to complete school by age 21?

-- Are certain student characteristics (e.g. students' age, reading scores, attendance record) associated with dropping out of alternative schools?

-- What factors do alternative school students say influence their decision to drop out or persist?

-- What kinds of alternative schools are most successful?

METHODS

Several types of analyses were applied to find out whether improvements in performance would endure and students would graduate. First, we compared the average number of absences and credits earned in the last two semesters of traditional high school with the average number of absences and credits earned in each of four subsequent

semesters of alternative school to see if absences decreased and credits increased and if the changes remained stable. A t-test was used to determine if the differences were statistically significant (i.e. was it meaningful or could it have happened by chance? Appendix A gives a fuller explanation of t-tests and other statistics used in this study).

For another indicator of success, we looked at the status of the students at the end of the fourth semester to see the frequency of dropping out versus graduating or remaining active in school. There were four categories:

-- Persisters: students who stayed in the program for the four semesters covered by our study (actives) or who graduated before the end of those four semesters (graduates).

-- Dropouts: students who left the alternative school before graduating and did not go into any other academic program that would lead to graduation.

-- Transfers: students who left the alternative school program to go into another academic program intended to lead to graduation such as a traditional school or GED program.[2]

-- Others: students who were forced to leave school because of factors which ranged from illness to incarceration.

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[2] The GED is a diploma that is granted to a student who studies for and passes a state qualifying exam without completing the high school curriculum.

Every effort was made to categorize students accurately in the process of data collection. However, it was not possible to be sure the correct determination was made in every case. For example, a student's record might indicate the youngster transferred to another academic program when a transfer was planned but did not eventuate. On the other hand, some dropouts ultimately entered a GED program. It was assumed, however, that errors in both directions balanced out.

These categories helped us to chart and interpret the progress of students for over four semesters of alternative education.

Finally, to judge success, we calculated how many credits the average student in each school would earn by the age of 21 to see if schools were likely to graduate students.

To answer the questions about what leads to dropping out of an alternative school, several additional analyses were applied. First, t-tests comparing persisters to dropouts on a number of previous and alternative school performance measures were done. To find out if persisters and dropouts differed in age, sex, or admission status, cross tabs were developed (See Appendix A for an explanation of cross tabs). Additionally, the content of the student interviews was analyzed to see if patterns of differences between persisters, transfers, and dropouts could be detected. Finally, the eight schools were ranked from those whose student bodies had the most characteristics associated with persistence to those with the least. This allowed us to compare their expected success at holding students with their actual success.

II. A LONGITUDINAL VIEW OF STUDENT PERFORMANCE IN ALTERNATIVE SCHOOLS

ATTENDANCE AND CREDIT

Attendance and credit records from four semesters confirm the Phase I findings that alternative schools facilitate positive changes in student performance. Students showed a marked improvement in attendance and credits earned that did not fade after the first semester. This effect was striking when we looked at the average of all four semesters of alternative schools in contrast with the average of the last two semesters in the previous school. When we compared each individual semester to the average of the last two semesters in the previous school, the differences were not always strong, but increased attendance and credit were evidenced in almost every alternative school semester.

The considerable improvements in the average attendance and credits for four semesters are depicted in Figures 2 (p.12) and 3 (p.13). In Figure 2 the solid line representing the number of alternative school absences is well below the broken line for previous school absences in all but one school. In that school, Middle College, absences are slightly higher than previously. However, this is not a discouraging finding, given the special nature of the Middle College students, who are moving directly from junior high to an alternative high school because they have been targeted as potential truants and dropouts. In addition, high school attendance tends to be lower than junior high in the general school popu-

FIGURE 2

AVERAGE DAYS ABSENT IN AN ALTERNATIVE SCHOOL SEMESTER AS COMPARED TO AVERAGE DAYS ABSENT IN A PREVIOUS SCHOOL SEMESTER

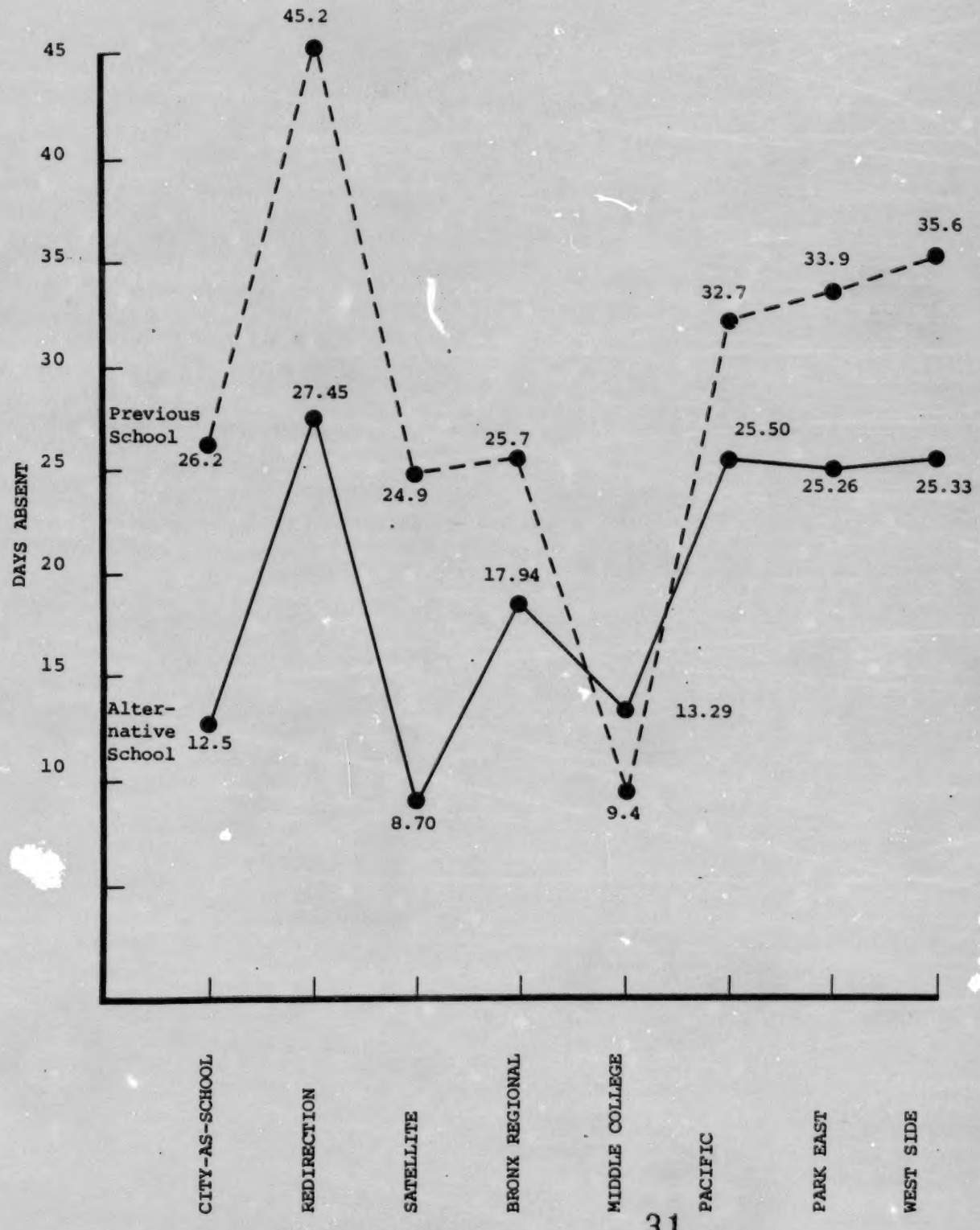
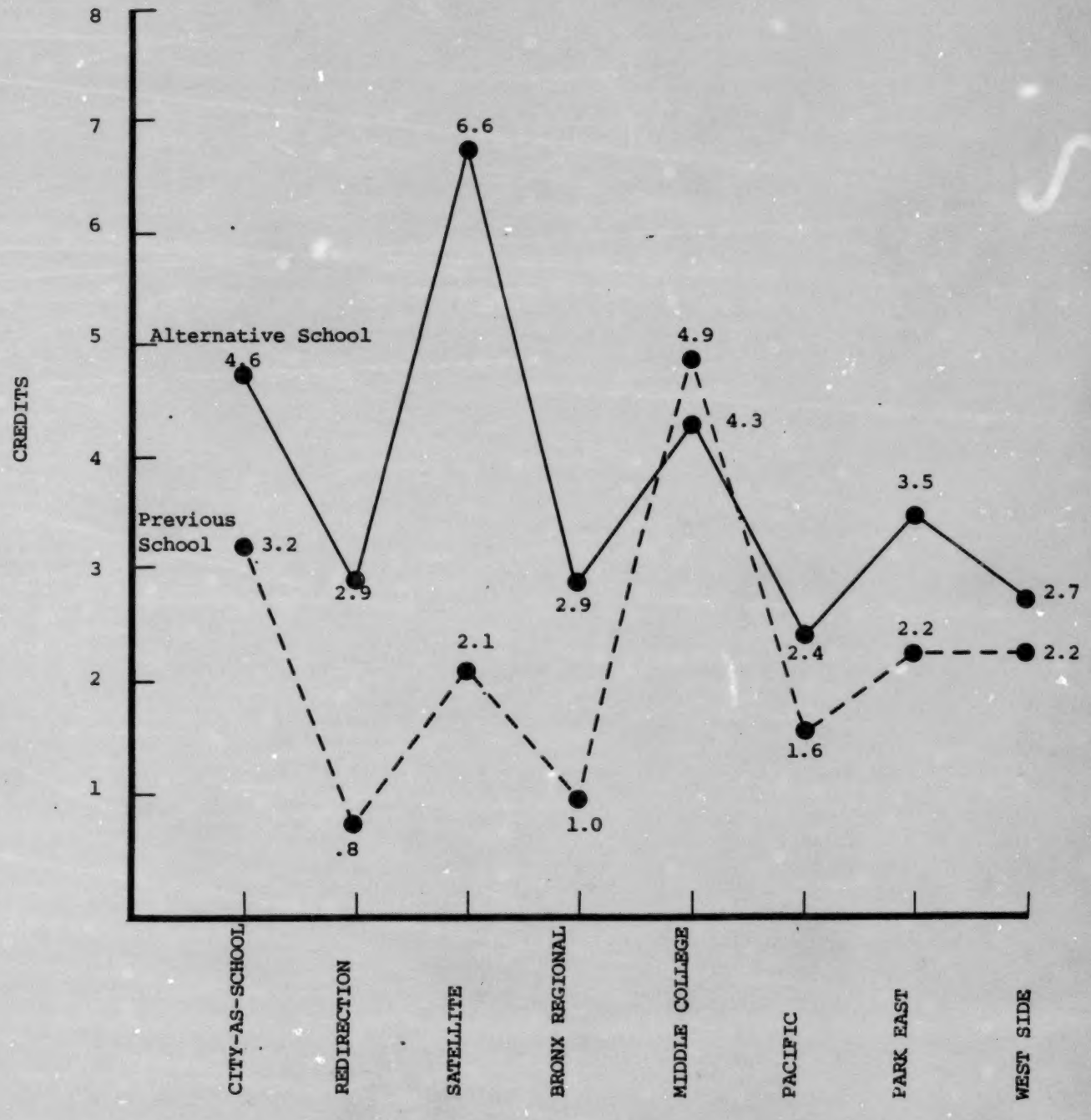


FIGURE 3

AVERAGE CREDITS EARNED IN AN ALTERNATIVE SCHOOL SEMESTER AS COMPARED TO AVERAGE CREDITS EARNED IN A PREVIOUS SCHOOL SEMESTER



lation. A comparison of Middle College attendance with the other schools in Figure 2 shows that Middle College students started out with relatively low absence rates and maintained them. Apparently Middle College is succeeding in its mission to prevent the greatly increased truancy that might be expected from this group. The graph illustrating the contrast between credit accumulation in the alternative and traditional schools shows the same general pattern as the attendance graph. The solid line depicting alternative school credits is above the broken line representing previous credits in all but one case, Middle College. Again, this negative finding is mitigated by the special nature of the Middle College students. Credits are expected to decrease from junior high to high school and students at Middle College are earning credits at an acceptable rate.

The comparison of each individual alternative semester with the average for the last two semesters[3] of traditional high school gives additional confidence that real and enduring changes occur for students who enroll in alternative high schools. Attendance and credit were better in most alternative semesters, allaying the fear voiced in our initial report that improvements might fade after the novelty of the first semester wore off. Tables I (p.15) and II

[3]Since we could not get semester-by-semester data in the previous school, the total absences for the last year in high school were divided by 2 to determine the average number of absences for each semester. The same method was used with credits.

TABLE I

THE NUMBER OF DAYS ABSENT DURING EACH OF FOUR SEMESTERS IN THE ALTERNATIVE HIGH SCHOOL COMPARED WITH THE AVERAGE NUMBER OF DAYS ABSENT IN EACH SEMESTER OF THE PREVIOUS YEAR.

School	Previous School	1st Semester Alt.	t	Previous School	2nd Semester Alt.	t	Previous School	3rd Semester Alt.	t	Previous School	4th Semester Alt.	t
Case Study Schools												
CITY-AS-SCHOOL (n = 65,36,21,10)+	26.2	13.6	4.05**	26.8	10.2	3.86**	32.2	12.1	2.84**	37.6	15.7	1.78
REDIRECTION (n = 44, 43,36,11)	45.2	29.5	4.16**	45.2	28.2	4.05**	42.4	26.0	3.24**	41.0	21.5	3.09*
SATELLITE (n = 24, 23,10,6)	24.9	9.2	4.51**	25.6	7.7	5.28**	27.5	8.4	3.93**	25.9	11.2	5.14**
Other Schools												
BRONX REGIONAL (n = 17,13,14,7)	25.7	11.5	3.46**	27.4	28.1	-.10	24.7	18.6	1.15	21.5	13.4	1.13
MIDDLE COLLEGE (n = 37,32,30,27)	9.4	11.4	-1.04	9.8	15.1	-3.27**	7.3	12.8	-2.83**	6.8	14.2	-3.09**
PACIFIC (n = 22,16,7,5)	32.7	21.2	2.58*	33.6	31.9	.30	33.9	25. 9	1.17	40.2	23.2	1.56
PARK EAST (n = 21,16,12,9)	33.9	27.2	1.20	32.2	26.9	.64	29.0	22.8	.95	28.1	21.1	.75
WEST SIDE (n = 40,26,22,18)	35.6	25.4	2.22*	27.5	27.6	-.02	28.9	19.5	1.39	27.1	28.9	-.21

+ The n's refer to the number of students in the 1st, 2nd, 3rd and 4th semesters respectively. They decrease because students dropped out or graduated each semester.

* $p < .05$

** $p < .01$

TABLE II

THE NUMBER OF CREDITS EARNED DURING EACH OF FOUR SEMESTERS IN THE ALTERNATIVE HIGH SCHOOL COMPARED WITH THE AVERAGE NUMBER OF CREDITS IN EACH SEMESTER OF THE PREVIOUS YEAR.

School	Previous School	1st Semester Alt.	t	Previous School	2nd Semester Alt.	t	Previous School	3rd Semester Alt.	t	Previous School	4th Semester Alt.	t
Case Study Schools												
CITY-AS-SCHOOL (n = 85,49,25,13) +	3.2	4.8	-4.43**	3.0	4.0	-2.03*	3.2	4.9	-2.53*	3.3	5.4	-1.90
REDIRECTION (n = 46,37,29,16)	.8	2.6	-6.49**	.8	1.9	-2.89**	.9	4.3	-5.25**	.8	3.7	-4.38**
SATELLITE (n = 26,25,13,6)	2.1	6.4	-6.82**	2.1	6.9	-7.31**	1.7	5.9	-4.19**	1.3	8.1	-4.88**
Other Schools												
BRONX REGIONAL (n = 17,14,16,9)	1.0	2.9	-4.95**	1.1	2.8	-2.64*	1.1	2.1	-1.88	1.1	3.3	-3.33**
MIDDLE COLLEGE (n = 38,32,28,25)	4.9	4.1	2.30*	4.9	4.3	1.38	4.9	4.5	.71	5.0	4.3	1.68
PACIFIC (n = 26,19,8,5)	1.6	2.4	-1.86	1.4	1.9	-1.09	2.4	3.6	-.81	1.7	2.1	-.55
PARK EAST (n = 26,24,21,18)	2.2	3.6	-2.90**	2.4	3.3	-1.68	2.4	3.5	-1.46	2.4	3.5	-1.51
WEST SIDE (n = 35,30,19,16)	2.2	2.5	-.89	2.2	2.4	-.46	2.9	3.4	-.89	3.3	3.0	.44

+ The n's refer to the number of students in the 1st, 2nd, 3rd and 4th semesters respectively. They decrease because students dropped out or graduated each semester.

* $p < .05$

** $p < .01$

(p.16) illustrate the comparisons and show the results of the statistical tests.[4]

Absences in the alternative school are less frequent in almost all of the comparisons (the major exception, Middle College, was explained in the previous section). Statistical tests showed that these differences were both significant and in the predicted direction in close to half of the comparisons (See Appendix A for a brief explanation of tests of significance). Those statistically significant improvements are found most consistently in the case study schools. In addition, they are found in the earlier semesters when the largest numbers of students are enrolled. The pattern for credits earned is similar to that for absences. Alternative school students show improved rates of credit accumulation in most semesters. Statistically significant differences in the predicted direction were found in almost half of the comparisons. Those significant improvements were most consistent in the case study schools and Bronx Regional.

While it would be preferable to find that more of the differences between the alternative and traditional school performance reached statistical significance, the frequency and consistency with which the averages improved suggests that the changes are meaningful. Moreover, because the non-significant comparisons tend to be in places where the numbers of students are very small, we can speculate that

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[4] Due to refinements in the data, some of the means and t-values for the first semester differ slightly from those reported in Foley & McConnaughy, 1982. This does not significantly alter the findings. However, the t-value of 1.86 for first semester credits earned at Pacific (Table II, p.8, 1982) was inaccurately reported as significant.

if we had a larger sample in each school more of the observed improvements would be statistically significant.

GRADUATION RATES

Although it is encouraging that students in most alternative schools attend more regularly and earn more credits, ultimate success must be measured by whether or not students stay in school and, indeed, earn enough credits to graduate. On this score, our findings were less encouraging. The schools we studied are clearly holding students and, in fact, graduating them in many cases, but it appears that in half of the schools, the student earning credits at the average rate for that school will not graduate by the age of 21.

All but one of the alternative schools are retaining more students than they lose out of a group who have previously had problems staying in school. (See Table III, next page). The dropout rate ranges from 8.4% to 38.4% over four semesters. This means that in some alternative schools, the dropout rate is clearly less than the citywide rate in regular high schools where students are not as dropout prone.

The graduation rate shown in Table III gives an additional picture of the effectiveness of these schools. The proportion of graduates ranges from zero to 73%. However, it is difficult to evaluate this data without reviewing the ages and credit accumulation of students upon entrance into the alternative schools. For example, the lack of graduates at Middle College shown on Table III is not alarming since those students entered from junior high and have not been in high

TABLE III

STATUS OF STUDENTS AT THE END OF FOUR SEMESTERS IN THE ALTERNATIVE SCHOOLS

	Percentage of Persisters (Actives)	(Graduates)	Percentage of Dropouts	Percentage of Transfers	Percentage of Others	Total Percent
Combined Schools (n=333)	31.9	22.5	25.4	16.6	3.6	100
Case Study Schools						
CITY-AS-SCHOOL (n=93)	10.8	35.1	29.7	21.6	2.8	100
REDIRECTION (n=48)	25.5	14.9	34.1	23.4	2.1	100
SATELLITE (n=30)	3.3	73.3	10.0	6.7	6.7	100
Other Schools						
BRONX REGIONAL (n=18)	44.4	0.0	21.3	27.8	5.6	100
MIDDLE COLLEGE (n=38)	75.0	0.0	8.4	13.9	2.8	100
PACIFIC (n=26)	19.2	19.2	38.4	15.4	7.6	100
PARK EAST (n=34)	59.4	9.4	12.5	15.6	3.1	100
WEST SIDE (n=46)	40.9	13.6	36.4	6.8	2.3	100

school long enough to graduate under normal circumstances.

To gauge the success of the alternative schools in terms of graduating youngsters, we projected what would happen to the students by the time they reached the age of 21 (when they would have to leave school if they had not graduated). Forty credits are needed to graduate. We calculated the average number of credits being earned per semester in each school and the average number of semesters left until the age of 21. Then we added the number of credits students would earn by the age of 21 (if they kept earning them at the same rate) to the average number of credits they brought from the previous school. This told us how many credits the average student would potentially accumulate before having to leave school. Figure 4 (See p. 21) shows the results of our projections. (See Appendix B for calculations). In four of the schools students are projected to graduate and in four they are not.

The foregoing assessments of alternative schools' graduation rates leave us with two different, but not contradictory conclusions. On the positive side, certain alternative schools exert holding power that appears greater than the traditional schools. On the negative side, while they are persisting, in half of the schools the students are not moving rapidly enough toward graduation. This is due in part to the low rate of credit accumulation and in part to the age of the students when they enter the alternative school. Thus, the alternative schools have taken a necessary and crucial step toward educating potential dropouts: they have kept them in school. However, not enough students, even among those who stay, are able to utilize that experience for completion of high school in a reasonable amount of time.

FIGURE 4

PROJECTED NUMBER OF CREDITS EARNED BY THE AGE OF 21

Case Study Schools	Credits
CITY-AS-SCHOOL (n=85)	57.7+
REDIRECTION (n=46)	27.6
SATELLITE (n=26)	77.2+
Other Schools	
BRONX REGIONAL (n=17)	32.1
MIDDLE COLLEGE (n=38)	51.0+
PACIFIC (n=26)	27.6
PARK EAST (n=26)	41.9+
WEST SIDE (n=35)	35.6

+Denotes schools in which the average student can be expected to graduate by the age of 21.

III. FACTORS WHICH LEAD TO DROPPING OUT OF ALTERNATIVE SCHOOLS

QUANTITATIVE FINDINGS

Several approaches were used to tease out the factors which might result in a student's dropping out of an alternative program. First we compared persisters to dropouts according to their performance in the alternative school, performance in the previous school, age and gender (See Appendix E for a definition of these terms) to see if the two groups were distinguishable along any continuum.[5] In search of clues as to how and when students begin to disconnect from school we also compared dropouts' previous school performance to their alternative school performance. The same comparison was made for persisters. In a more direct approach a small group of students were asked in open-ended interviews to discuss their feelings about the schools, including the teachers and their peers, their parents' attitudes toward their high school education, and their own reasons for staying, transferring, or dropping out.

Differences Between Persisters And Dropouts

The statistical comparisons revealed that students who will eventually drop out perform quite differently in the alternative school than students who persist. Both their attendance and credit accumulation are poorer in almost every semester. In Table IV (p.23)

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[5] Transfers were not included in this analysis since they are not really dropping out of school.

TABLE IV

DIFFERENCES BETWEEN PERSISTERS AND DROPOUTS
IN ALTERNATIVE SCHOOL PERFORMANCE

	Persisters' Mean	Dropouts' Mean	t
Absences			
1st Semester (n=163, 75)+	13.3	28.8	-6.09**
2nd Semester (n=149, 46)	15.0	29.4	-3.90**
3rd Semester (n=130, 20)	13.0	34.6	-5.18**
4th Semester (n=106, 1)	17.7	19.0	- .84
Credits Earned			
1st Semester (n=159, 76)	4.7	2.2	7.91**
2nd Semester (n=155, 47)	4.5	1.8	6.86**
3rd Semester (n=131, 16)	5.0	0.7	11.89**
4th Semester (n=114, 1)	4.1	2.3	7.58**

+ The n's refer to the number of persisters and dropouts respectively.

** $p < .01$

we can see that dropouts are absent about twice as many days as persisters in every semester but the 4th and the differences in all but the 4th semester are statistically significant. (It is difficult to interpret the data from the 4th semester since there is only one dropout in the sample at that point). Dropouts earned less than half as many credits as persisters in every semester, a difference which is significant in every comparison (Table IV). (Again, it is difficult to interpret the 4th semester because there is only one dropout).

The discovery that eventual dropouts perform more poorly than persisters as early as the first semester of alternative school suggests that early detection and intervention is possible. This finding led us to speculate that the differences might emerge even before these students reached the alternative schools. Comparisons of previous school performance (Table V, p.25) verified that on some measures dropouts were different from persisters even before entrance into the alternative school. They attended significantly less and earn significantly fewer credits in their last year of traditional high school. Indeed, a majority of the students who dropped out of alternative schools had dropped out or or were excessively truant from their previous school (See Table VI, p.25). Only a small proportion of the dropouts had transferred. Interestingly enough, the last reading and math tests taken in traditional high schools did not differentiate the two groups statistically, although the eventual dropouts did score slightly lower on both tests. This means that academic performance

TABLE V

DIFFERENCES BETWEEN PERSISTERS AND DROPOUTS IN PREVIOUS SCHOOL PERFORMANCE

	Persisters' Mean	Dropouts' Mean	t
Last Reading Score (n=99, 45)+	9.1	8.7	0.84
Last Math Score (n=85, 42)	8.4	7.9	1.09
Average Days Absent in the Last Two Semesters of High School (n=143,64)	52.4	74.9	-3.05**
Credits Earned in the Last Two Semesters of High School (n=157, 76)	5.6	3.9	2.87**

+ The n's refer to the number of persisters and dropouts respectively.

** $p < .01$

TABLE VI

PERCENTAGE OF TRANSFERS, TRUANTS AND DROPOUTS AMONG PERSISTERS AND DROPOUTS

Entering Status	Persisters (n=127)	Dropouts (n=66)
Transfers from Previous School	49.6	21.2
Truants from Previous School	28.3	42.4
Dropouts from Previous School	22.0	36.4
TOTAL	100.0	100.0

Chi Square = 14.68**

**$p < .01$

is more important than academic skill in determining who drops out and who persists in alternative schools. Not surprisingly, dropouts from alternative high schools were significantly older than persisters when they began their alternative education as shown in Table VII, (p.28) but there was no difference between dropouts and persisters by gender, (Table VIII, p.29).

The distinct differences in the alternative and previous school performance between persisters and dropouts led us to wonder if students who ultimately drop out make noticeable gains at any point in their alternative education. To answer this we compared dropouts' previous attendance and credit with their attendance and credit in each alternative semester. We made the same comparisons for persisters. Table IX (p.30) shows that the dropouts made only negligible gains in attendance; only the first semester increase is significant. For persisters, on the other hand, the improvements in attendance were significant in all but the fourth semester. An even more illuminating pattern can be seen in credits earned for dropouts (Table X, p.31). Their rate of credit accumulation hardly changed from traditional to alternative school in any semester. Persisters however made significant gains in credit in every semester.

The quantitative analyses comparing persisters to dropouts show an unmistakeable pattern of difference between the two groups. Alternative school dropouts are older and come into the school with fewer credits and a history of extremely poor attendance, often to the point of dropping out. In addition, they fail to improve their credit accu-

TABLE VII

PERCENTAGE OF PERSISTERS AND DROPOUTS
IN EACH ENTERING AGE GROUP

Entering Age	Persisters	Dropouts	Total
14 yrs. (n=5)	100.0	0.0	100
15 yrs. (n=41)	90.2	9.8	100
16 yrs. (n=81)	72.8	27.2	100
17 yrs. (n=62)	61.3	38.7	100
18 yrs. n=31)	35.5	64.5	100
19 yrs. (n=18)	61.1	38.9	100
20 yrs. (n=1)	100.0	0.0	100

Chi Square = 29.64**

** $p. < .01$

TABLE VIII

PERCENTAGE OF MALES AND FEMALES AMONG PERSISTERS AND DROPOUTS

Gender	Persisters (n=166)	Dropouts (n=78)
Females	54.8	56.4
Males	45.2	43.6
Total	100.0	100.0

Chi Square = .01 (not significant)

TABLE IX

THE NUMBER OF DAYS ABSENT DURING EACH OF FOUR SEMESTERS IN THE ALTERNATIVE HIGH SCHOOL COMPARED WITH THE AVERAGE NUMBER OF DAYS ABSENT IN EACH SEMESTER OF THE PREVIOUS YEAR

	Previous School	1st Semester	t	Previous School	2nd Semester	t	Previous School	3rd Semester	t	Previous School	4th Semester	t
Persisters (n=139, 128, 114, 91)+	26.0	14.2	6.04**	25.6	15.2	4.62**	25.4	13.5	4.81**	23.7	18.8	1.75
Dropouts (n=62,39, 18,1)	37.7	29.3	2.52*	37.2	31.0	1.30	35.7	35.7	.01	55.5	19.0	---

+The n's refer to the number of students in the 1st, 2nd, 3rd, and 4th semesters respectively.

*$p < .05$

**$p < .01$

TABLE X

THE NUMBER OF CREDITS EARNED DURING EACH OF FOUR SEMESTERS IN THE ALTERNATIVE HIGH SCHOOL COMPARED WITH THE AVERAGE NUMBER OF CREDITS EARNED IN EACH SEMESTER OF THE PREVIOUS YEAR.

	Previous School	1st Semester	t	Previous School	2nd Semester	t	Previous School	3rd Semester	t	Previous School	4th Semester	t
Persisters (n=149, 145,121, 104)+	2.8	4.8	-8.10**	2.8	4.5	-6.88**	2.9	5.0	-6.78**	2.9	4.2	-3.92**
Dropouts (n=76,46, 16,1)	2.0	2.3	-1.11	1.7	1.8	-.31	1.8	.7	2.06	1.8	2.3	----

+The n's refer to the number of students in the 1st, 2nd, 3rd, and 4th semesters respectivelv.

** $p < .01$

mulation in the first or any subsequent semester of alternative school. Although none of these factors alone is reason enough to tag a student as a potential alternative school dropout, a combination of them seems to portend problems.

QUALITATIVE FINDINGS: STUDENTS' REASONS FOR DROPPING OUT

To supplement the quantitative analyses and see if the subjective experiences of alternative school students corresponded with our interpretations, interviews were conducted with current and former students in three of the schools in our sample. The three, City-As-School, High School Redirection, and Satellite Academy, were chosen because they serve distinctly different student groups and represent the range of available alternative school programs. They were also the schools studied intensively in the first phase of the research (Foley & McConnaughy, 1982).

From among the 300-student sample in the first phase of the research we attempted to interview twenty-four persisters, fifteen dropouts, and fifteen transfers. We were actually able to speak to twenty-one persisters, ten dropouts, and eight transfers. A detailed description of the principles and process for selecting and contacting interviewees is given in Appendix C. The small size of the interview sample was governed by methodological and economic considerations which are described there. However, this group is reasonably representative of the larger sample.

Profile of Students Interviewed

Of the thirty-nine respondents, sixteen were male and twenty-three female; there were twenty-three blacks, nine Latins, six whites, and one Asian. Most were 18 or 19 years old, and had attended at least two schools prior to the alternative school. All

but four lived with a parent or guardian, and though family size varied, dropouts did not characteristically come from larger families. Twenty-one of the students worked, and, while only 30% of the dropouts worked as compared to 71% of the others, the working dropouts all worked full time (30-50 hours). Only six students reported working to contribute to the support of their families.

Responses Regarding School Climate

In this series of questions dropouts, persisters and transfers were asked how they felt about their school, in particular whether they felt safe.

Interestingly, dropouts as well as persisters in all three schools reported liking the school:

"...it's great. Students are like a family."

"...everybody knows everybody."

"...there's no racial or social discrimination. Each person has his own identity."

While this seemed to suggest that dropouts were leaving school for personal rather than school-related reasons, further questions revealed distinctions in the views of dropouts and persisters at Redirection and at City-As-School. At High School Redirection, leavers reported more conflicts with other students, and three of four dropouts thought the school was unsafe though only one persister felt unsafe. At City-As-School, dropouts reported more conflicts with teachers than persisters did. These comments are a clue that the social relations of dropouts may be a factor in their decision to leave school

even though they do not directly complain about the school's climate.

Follow-up questions regarding students' attitudes toward teachers and peers confirmed this view. As a whole, students' attitudes towards teachers were remarkably positive. Every student at Satellite praised the teachers; only one at Redirection and a few at City-As-School had anything negative to say. Their remarks are typified by this student:

> "...caring ... they only want the best for their students... friendly... very easy to talk to. They're always there for a personal problem. You can confide in them and feel that it will never go any further... they treat us like adults."

While the numbers of students reporting negative or even vague or neutral feelings toward their teachers is very small, it is interesting to note that the percentage of students in each category reporting these feelings increases as we move from persisters (8%) to dropouts (20%) to transfers (62%). (See Table XI below).

TABLE XI

ATTITUDES TOWARDS TEACHERS

	Persisters	Dropouts	Transfers	Total
Positive	19	9	3	31
Mixed/Neutral	1	1	2	4
Negative	0	1	3	4
TOTAL	20	11	8	39

Similarly, though persisters have generally positive attitudes toward peers, none of the dropouts and transfers at Satellite, City-As-School, or Redirection were very enthusiastic about the other students. This reinforces the notion that youngsters leave alternative school because of unsatisfactory social adjustments.

Supporting this further, we found that none of the dropouts and only one of the transfers in the entire sample participated in extra-curricular activities, though 45% of the persisters did.

Responses Regarding Academic Program

Few clear distinctions emerged across schools when dropouts, persisters and transfers were asked what they felt they were learning in the alternative school, if they liked the curriculum, how it fit in with their plans, and whether they had any academic problems. While persisters in all three schools liked the courses, so did dropouts from City-As-School and Satellite Academy (though not from Redirection). Furthermore, dropouts from City-As-School and Satellite did not report any particular difficulty with the course work, though this was not the case with dropouts from Redirection where three of four dropouts interviewed had difficulty with the course work despite the enormous investment Redirection makes in remediation.

One factor with regard to academic program distinguished dropouts from persisters across schools. A sizeable number of persisters said they were developing important personal, life or social skills in the alternative school, saying, for example:

"...I'm learning what the real world is going to be like."

"...I'm learning how to deal with people."

"...this school better prepares you for life. It exposes you to a variety of things."

Not one dropout or transfer, however, reported that the school was helping them to understand or better cope with the world. The relevance of the curriculum to the dropout was limited to specific academic or vocational skills. Youngsters said for example, "I learned to type" or "I learned math," suggesting that these students do not connect what goes on in school with broader life concerns.

Perceptions of Parents' Expectations

The literature on early school leaving consistently reports that the parents of dropouts offer their children little encouragement to remain in school. Most of the students interviewed, however, said their parents expected them to graduate from high school (See Table XII below).

TABLE XII

STUDENTS VIEWS OF PARENT'S EXPECTATIONS REGARDING H.S. DIPLOMA

	Persisters	Dropouts	Transfers	Total
Expected	16	10	8	34
Not Expected	4	0	0	4
No Answer	1	0	0	1
TOTAL	21	10	8	39

It is also noteworthy that the four students who reported that their parents did not expect them to graduate were from Redirection, the school which attracts the lowest socio-economic status and least academically prepared students. As one such youngster said:

"...no, nobody graduated in our family. My teachers had confidence in me and that helped me to go on."

Thoroughly in keeping with the expectation that families of dropouts would have a lower press for achievement was the finding that nearly 80% of the persisters said their parents would be very displeased if they dropped out while only 40% of the dropouts responded that way. Most dropouts thought their parents would not know or would be apathetic.

Dropouts' Explicit Reasons for Leaving School

Though dropouts' attitudes toward other students, the curriculum and their parents' involvement in their education appear to influence the decision to leave school, these are rarely the reason they state for dropping out. For example, three of four dropouts from Redirection said they did not get along with other students and had difficulty with the curriculum; they expressed their reasons for dropping out, however, as follows:

"...I was discharged...I was taking a lot of days out."

"...I did not like the school."

"...I was discharged...because I wasn't going to school."

the other four had moved) turned out to be a transfer to Auxilliary Services where she was working toward a G.E.D. Nonetheless her remarks support the hypothesis that early school leavers have less of an investment in the people and curriculum in the school:

"...when I heard about the G.E.D. test...I simply wanted to leave."

The pattern of disengagement at City-As-School is similar. Two dropouts said they left school to work:

"...I realized that I needed money. I wanted things."

"...I couldn't go to school and work at the same time so I quit school."

These City-As-School dropouts had not seen relevance in the curriculum beyond their immediate career ambitions; they said City-As-School was preparing them to get a job and that they now had one. Another City-As-School student more clearly expressed the disengagement of the dropout from the ordinary life of the school:

"...I don't remember why I dropped out, oh, yes, I only needed one more credit to graduate and I was hoping that they would somehow squeeze it in from somewhere."

The fourth City-As-School dropout was explicit about disliking other students, and the fifth, more like the previous students who simply fell away from the school, said:

"...I moved and then got married."

These remarks suggest that many alternative school dropouts

leave because they are not strongly connected to the people in or the goals of the institution and other matters become more pressing. It is not that something particularly noxious is occurring.

These conclusions about the lack of noxious stimuli are reinforced by students' responses to the question, "What could the school have done to keep you attending?" Half of the students said there was nothing that the school could have done. Of course, the other half gave the impression that there was something the school could have done. Two said that the school could have provided better courses, two said they needed day care, and one that he should have been advised to transfer. All but the last student agreed that the school had tried to help them with their problem.

What is perplexing in light of dropouts' decision to leave school is the finding that they do not appear to have career aspirations that are markedly different from those of persisters. Virtually all said that they wanted more education for themselves, that they would advise others to stay in school, and that high school prepares you to make a better living. It seems, therefore, that students want to stay in school but have difficulty maintaining the motivation to persist.

Summary of Interview Results

While the number of students interviewed is small, their answers suggest some school and life experiences of dropouts which may dispose youngsters to make a decision that they themselves regard as shortsighted.

The most salient difference between dropouts and persisters was the quality of their social relations, especially their peer relations. Both groups generally liked their schools and especially their teachers, yet none of the dropouts or transfers from Redirection or Satellite had positive remarks to make about other students. Some of those who left City-As-School had positive things to say, but all of the negative remarks about other students were made by dropouts or transfers. Furthermore, none of the dropouts from any of the three schools participated in extra-curricular activities. Isolating them still more was the fact that those who worked, worked full-time, leaving little opportunity for peer-related experiences outside of the school.

The impact of academic factors on students' decisions to drop out were less clear than the impact of social factors. Students at City-As-School and Satellite did not view their academic preparedness as a factor in persisting or dropping out. At these schools, the ordinary business of life --- getting married, having children making money --- simply became more compelling to the youngster not deeply engaged in the social or intellectual life of the school than getting a diploma. At Redirection, a school that enrolls large numbers of very academically handicapped students, academic readiness seemed to play an important role.

Finally, it seems that while dropouts and their parents generally believe that completing high school is a good idea, neither have fully

internalized its importance. The parents of dropouts are less involved in their children's education and less clear about their expectations for the child. While not traditionally a major component of dropout prevention programs, the parent may be an important part of the supportive network which the school constructs around the dropout-prone youngster.

IV. FACTORS WHICH INFLUENCE THE HOLDING POWER OF ALTERNATIVE SCHOOLS

The previous section suggested two sets of factors that play a role in determining whether students persist in alternative schools or drop out. One is the entering characteristics of students, specifically students' age upon entry into an alternative school, admission status, and absences and credit accumulation in the last year in the traditional school. The other is the actual performance of students in alternative schools.

Given the clear association of age and academic disadvantage with dropping out, students' entering characteristics might explain the differences among alternative schools in their ability to exercise holding power. One might suppose that schools which attract the higest-risk youngsters would have the lowest proportions of persisters.

In order to test this supposition, we ranked schools according to the expected persistence level of their students based on their entering characteristics. Then we ranked them according to the actual persistence level of their students. (See Table XIII p.44; Appendix D provides a detailed explanation of how these ranks are derived). When we compared each school's expected persistence rank to its actual persistence rank, we found that the ranks were generally very similar. Apparently a school's holding power is highly related to the risk level of the students it attracts. The major exception to this trend toward correlation was Satellite Academy whose actual persistence rank is higher than that predicted. Students there persist in greater

TABLE XIII

ACTUAL PERSISTENCE RANK COMPARED TO EXPECTED PERSISTENCE RANK OF EACH ALTERNATIVE SCHOOL

Schools	Expected Persistence Rank	Actual Persistence Rank
Case Study Schools		
CITY-AS-SCHOOL	5.5	4
REDIRECTION	1.4	2
SATELLITE	4.8	7.5
Other Schools		
BRONX REGIONAL	3.6	3
MIDDLE COLLEGE	8	7.5
PACIFIC	2.8	1
PARK EAST	5.5	6
WEST SIDE	4.5	5

numbers than would be expected.

What accounts for the success of schools which encourage persistence beyond expectations? As was demonstrated earlier, if students obtain credits in alternative schools they are likely to persist, and if they do not, they are likely to drop out. Tables IV and X (pp. 23 and 31) illustrate this point. Proceeding with this logic, it is certainly true that students at Satellite earn an exceptionally large number of credits on the average (See Figure 3, p.13). Given these two facts, the possibility exists that an increase in credit accumulation alone explains why students sometimes persist beyond expectations. To test this hypothesis, we ranked schools on the average credits of their students for the four semesters studied and compared those ranks to their actual persistence ranks (See Table XIV, p. 46; Appendix E explains how these ranks were derived). While achievement is an important factor in persistence, Table XIV, which shows the two sets of ranks, demonstrates that it is not a complete explanation. City-As-School's credit rank is much higher than its persistence rank. While that school has many persisters, it has fewer than one would expect based upon student performance. Apparently credit accumulation alone is not sufficient to boost persistence in these schools. The interviews which preceded this section suggest that City-As-School's external learning program, while enormously stimulating, can be somewhat isolating. The present analysis indicates that for some youngsters earning credits in this manner does not provide enough social-emotional connection to hold them in school.

TABLE XIV

ACTUAL PERSISTENCE RANK COMPARED TO CREDIT RANK OF EACH ALTERNATIVE SCHOOL

Schools	Credit Rank	Actual Persistence Rank
Case Study Schools		
CITY-AS-SCHOOL	7	4
REDIRECTION	3.5	2
SATELLITE	8	7.5
Other Schools		
BRONX REGIONAL	3.5	3
MIDDLE COLLEGE	6	7.5
PACIFIC	1	1
PARK EAST	5	6
WEST SIDE	2	5

Let us now return to the original question, what accounts for the relative success of the alternative schools with at-risk youth? Clearly, there are at least two factors involved. The differences in the academic preparedness of students explains much of the variation among alternative schools in much the same way that it accounts for variation in high schools in general. The schools' programs, however, are also a major factor. Schools like Satellite Academy which both stimulate academic achievement and create a highly cohesive environment for students have the greatest success in holding youngsters.

V. CONCLUSIONS FROM THE SECOND PHASE

This investigation of alternative school students has resulted in a set of findings which confirm our initial confidence in the school programs, provide insight into motives for dropping out, and give clues to the additional interventions needed to enable at-risk youngsters to stay in school.

LONG-TERM EFFECTIVENESS OF THE ALTERNATIVE SCHOOLS

In most of the alternative schools students are performing better than they did in traditional schools and their improvement in both attendance and credit accumulation lasts for at least four semesters. These changes are most stable in the three case study schools. Among the others (except Middle College) the comparisons of each of four semesters with the last two semesters in a traditional high school usually showed a decrease in absences and an increase in credits earned. Although a number of the differences were not significant, the frequency and consistency with which the averages improve gives confidence that the changes are meaningful. The fact that students at Middle College were absent significantly more often and earned somewhat fewer credits than they had in their previous schools must be interpreted in light of two facts. They are the only group in this study that is moving directly from junior high to high school, a time when attendance and credit accumulation tend to decrease. In addition, the Middle College students, though flagged by their guidance counselors as potential dropouts, start with relatively good

attendance records and more credits than the other students in the sample.

The dropout rate in alternative schools is often considerably lower than citywide dropout rates for traditional schools. Even the highest dropout rate in the alternative schools (38.4% after 4 semesters) seems comparable to the citywide rate of 45% after 8 semesters. The lowest rate was 8.4%. In a group of students, many of whom had already dropped out of a traditional school or were on the verge of it, this is an encouraging finding.

While most of the schools had graduated some students after four semesters, in only four of the schools does it appear that students earning the average number of credits for that school will graduate by the age of 21. The schools where the average student will apparently be unable to graduate have taken the first step of keeping students connected to the academic setting. However, they must find ways to increase the rate of credit accumulation even more to help the students meet the ultimate criterion of school success -- a diploma.

FACTORS ASSOCIATED WITH DROPPING OUT

Alternative school dropouts have distinctly poorer attendance and achievement records than persisters throughout their alternative school career. Indeed, alternative school dropouts do negligibly better in these schools than they had in their former settings. This means that faculty and administration need to be alert to students who do not make progress and provide additional incentives for them to stay in school. The incentives need to be those that encourage

academic success, such as offering students highly motivating teachers and courses and more frequent rewards.

Dropouts from alternative schools tend to be older students who had the poorest attendance and credit accumulation in their previous school and were excessively truant or dropped out from that school. The fact that the students who drop out do not have significantly lower reading and math scores indicates that their problem is one primarily of motivation rather than ability.

The possibility of predicting who will have problems staying in the alternative school at the time they enter, and certainly after one semester, increases the opportunities for intervention. The interviews that were conducted with a small group of students from the three case study schools helped to pinpoint what kinds of intervention should be attempted.

The most salient difference between persisters' and dropouts' descriptions of their alternative school experience is in the quality of their social relations. Though both groups reported liking their schools and teachers, none of the dropouts (or transfers) from Redirection or Satellite made positive comments about other students. Some students who left City-As-School had positive remarks about their peers, but all of the negative ones were made by dropouts or transfers. To add to the sense that the quality of social relations is worse for dropouts, none of them in any of the case study schools participated in extra-curricular activities. Isolating them further was the fact that those dropouts who worked, worked full-time, leaving little time

for school-related friendships or activities.

Only the most academically disadvantaged dropouts implied that they left the alternative school for academic reasons. At City-As-School and Satellite, students viewed the ordinary business of life -- getting married, having children, making money -- as the impetus for their leaving school. At Redirection, a school which enrolls large numbers of academically handicapped students, students more frequently mentioned not liking the work or having difficulty with it.

According to dropouts' own reports, their parents were less alert to their educational progress, although they expected them to graduate. This was especially true of students who were most academically disadvantaged.

From these student reports and our quantitative analysis we can posit the dynamics which eventually result in leaving school. One dynamic is the failure to connect with the school in a personal way. A student who has already shown a predisposition to drop out can be attending school and even earning sufficient credits and still become uninterested in staying in school if there are not enough rewarding personal interactions to draw him or her into the school community. A student's likelihood of dropping out is multiplied if he or she has the additional burden of finding the work too difficult and the number of credits needed to graduate too great. Finally, if parents are not alert to the student's needs and progress, he or she will be even less likely to stay in school.

For the most part, as in schools generally, the level of student persistence found in an individual school is a function of the risk level of its student body. However, these schools manage to exceed the expectations held for students often given up for lost. Satellite Academy, exemplifying the best features of all the schools, realizes this possibility to an exceptional degree.

There was a very close association between the actual persistence of students and the average credits they earned during four semesters of alternative school. This indicates that, in most instances, at least part of the motivation for staying in school comes from academic success. One exception to this association was instructive, however. In City-As-School, where students rank high in average credits earned, the actual persistence rank is only at a medium level. Along with the results from the interviews, the finding indicates that external learning, while very stimulating academically, needs to be balanced with an opportunity for students to make a personal connection to school.

VI. LESSONS FROM PHASES I AND II OF THE ALTERNATIVE SCHOOL STUDY

The initial phase of PEA's investigation of alternative schools resulted in a sense that these schools were succeeding with potential and actual dropouts where others had failed. More important, a model of effective alternative education was constructed based on extensive interaction with the school communities. The follow-up phase has confirmed our confidence in the effectiveness of the schools and provided refinements for the model. In short, this research project has taught us that there is a model of alternative schooling which can be extremely effective with at-risk students who are not yet over-age for high school. For the over-age students (17 years plus) in the lower range of academic preparedness, the model is not sufficient to insure graduation, although it does improve student performance.

THE MODEL

At the heart of the model gleaned from observations and interviews in alternative schools is the interrelationship between school climate and academic programming -- a relationship that rebuts the concern that alternative schools sacrifice academics for "good vibes." The strength of the schools seems to lie in their well-focused academic programs and their capacity to engage students and teachers in a dialogue that reaches beyond the formality of roles and fosters creative human relationships. In the best schools these relationships are not set apart or allowed simply to dangle alongside the instructional and

organizational features of the school. They inform the curriculum and structure of the school and clear the way for teaching and learning.

The fostering of exemplary teaching-learning relationships is the outgrowth of several features of the alternative schools. First, they have well-defined student populations; they know what their students need and program accordingly. Second, they have principals who are strong academic leaders and work with faculty to ground curriculum in the reality of students' lives, their intellectual needs, and school system requirements. Third, teachers' roles are diversified to allow for increased managerial participation, time to develop curriculum cooperatively, and for opportunities to counsel students. Counseling enhances teachers' sensitivity to students' needs while administrative authority increases the likelihood that this understanding will result in better programming. Fourth, teachers develop curriculum together in an ongoing way which continually seeks more appropriate responses to students' academic needs. Fifth, partial course credit, fast-paced cycles, and learning contracts enhance students' opportunities to succeed academically. Sixth, alert participation is encouraged by inviting students to take part in regular classroom discussions, make decisions regarding the courses they will take, and learn through doing. Seventh, students are involved in activities critical to school goals, such as admissions and course evaluation. Eighth, a few commonly agreed upon, frequently discussed school rules establish clear standards for conduct, and a highly structured support system enables students

to live within those rules. Finally, small school size, the factor most principals and teachers thought critical to their ability to reach students, encourages communication and a sense of belonging and limits the bureaucratic obstacles to leadership and programming.

REFINEMENTS IN THE MODEL

Among the five schools -- City-As-School, Middle College, Park East, West Side, and Satellite Academy -- which work with students who are generally of high school age, Satellite Academy appears to elicit the most dramatic improvements in attendance, credit accumulation, and persistence. It is also, not surprisingly, the school which most fully utilizes the various components of the model just articulated. Some further elaboration of that model is in order.

Satellite Academy is composed of four semi-autonomous academies located at different sites throughout the city: Manhattan (2), Bronx (1), and Queens (1). The academies share a mission to improve academic achievement, foster emotional growth, and increase exposure to career options. Within this framework, each academy has flexibility to fashion its own academic program.

The emphasis on academic achievement, and the development of a structure which supports it, are the source of much of the strength of Satellite Academy. The major structural support for its educational focus is a group management model for administration and planning. Thus, although the principal is the chief administrator and is responsible for supervision of the overall educational program, major policy decisions

for the system are made by a management team composed of the coordinators of each academy and a staff representative from each. Within each academy, all staff members and the coordinator define educational goals and establish an annual contract with the principal identifying areas for evaluation. All staff members in each academy work as an active team with responsibility for performance, curriculum development and programming, and daily operations.

In addition to their managerial roles, teachers have extended responsibilities for student support services, i.e. personal and academic counseling, attendance and programming. These services are conducted primarily in the context of student advisory groups through a group process in which students develop helping relationships among themselves and with the teacher-advisor.

Teachers' extended managerial and counseling roles have important implications for the instructional program. Satellite teachers have the opportunity to find out what students need and the authority to implement this understanding in relevant curricula. A very clear procedure exists for implementing new courses with considerable discussion and written exchange between the teacher, the coordinator of the academy and the principal.

Continual staff development is a major commitment of the principal to prepare teachers for their managerial roles, their expanded instructional roles and for their diverse responsibilities for student support services. The principal conducts school-wide staff training sessions

focusing on such issues as questioning techniques, learning through inquiry and interpersonal skills development. Within each academy, staff coach each other through a "round robin" system in which a teacher observes another teacher of his/her choice in class and then discusses the implications in a post-observation conference. Satellite teachers had very high aspirations for achievement in the teaching profession and they felt supported by the substantial opportunities to exercise managerial and instructional leadership.

Each academy is also committed to maximizing student participation in all areas of school life through formal and informal methods. For example, each student negotiates a contract concerning work and credit with the instructor of each class. Evaluations of student performance involve the student, the instructor and the peer group. Students also evaluate the courses and their responses are taken into account at a curriculum reorganization session at the beginning of each cycle.

Each academy has a well-structured student governing body. An example is the Chambers Street Academy's CORE composed of student representatives from homeroom groups. CORE initiates certain matters of school policy such as installing a soda machine in the lunchroom. In reality, CORE cannot contradict staff decisions although it may modify them.

Student discipline is CORE's ultimate and major responsibility. When a student has violated critical school rules, as for example by fighting, he or she is given an appointment to appear before CORE

with a teacher advisor as advocate, and any necessary witnesses. CORE will hear the evidence, render a decision and propose a resolution.

Our study focused on the Chambers Street Academy in Manhattan which has a population of approximately 160 students, making it the second smallest academy. The small size of the academy furthers the sense of belonging and deepens the personal quality of relationships among its members. Small size also increases the pressure on the staff to develop a large repertoire of courses as departments can be comprised of as few as one teacher. While demanding, these efforts ensure that the curriculum is continually developing and, in effect, through successive approximations, growing more appropriate. The academy is staffed by ten full-time teachers (including the coordinator), a paraprofessional and a counselor.

Students are admitted to the Chambers Street Academy following a student-run interview overseen by a staff member; motivation to learn is one of the major criteria for acceptance. New students attend a series of orientation sessions and are assigned a "buddy" who will check on their progress the first cycle and help them navigate the new system. As a consequence of this admission procedure and Chambers Street Academy's optimum location, students entering the school tend to be more highly motivated and to have slightly higher academic skills than students in the other academies. Overall, however, the Chambers Street Academy is representative of the program of the Satellite Academy as a whole.

INTERVENTIONS FOR THE LEAST-PREPARED STUDENT

Each of the three schools which serve the most academically disadvantaged youngsters -- Pacific, Redirection, and Bronx Regional -- improve student performance on one or more of the outcome measures. In absolute terms, however, most of their youngsters continue to perform very poorly. In any one cohort few ultimately graduate. Seeing this, the administrators of these schools faced and continue to face a difficult decision: change their clientele (that is, admit students who are more likely to be successful) or change their mission. In compassion for the many older students with few credits who come to them, these principals have chosen the second option and altered their goal from preparing students explicitly for the diploma to helping youngsters in jeopardy. Interviews with students suggest that this mission has had a complicating and perhaps adverse impact on curriculum since teachers' academic expectations waiver when students are not pursuing explicitly academic goals.

Essentially this means that to serve youngsters more effectively alternative schools with extremely academically disadvantaged and over-age students must expand their intervention strategy, change their goals, or work with younger students more likely to graduate. As this study points out, early intervention is possible. The example of Middle College, which recruits junior high students and appears to be moving them toward graduation, shows that this strategy works with students with moderate academic deficits. Whether post-

junior high school is soon enough to intervene for those who are most deficient is a matter for further research.

Despite its importance, earlier intervention would provide little comfort for older currently enrolled students. It is not apparent yet how best to serve these students. Considerable research and program modelling needs to be done to suggest an answer to this persistent problem.

REWARD AND THE CRITICAL FIRST SEMESTERS

One must conclude, for many students -- especially former dropouts -- alternative schools are too little too late. The one ray of hope which shines through these rather dark findings about the older underachiever is the fact that these youngsters, like all students, respond to reward. For the high risk student as for others, reward or credit accumulation is strongly associated with persistence and failure or lack of credit is highly associated with dropping out. This suggests the critical importance of stimulating student achievement particularly in the early semesters when students are developing patterns of performance. Assigning the most at-risk youngsters to exciting and appropriate classes with expert teachers, and developing a credit policy which frequently rewards students for learning, is a strategy which would be worth attempting in a more systematic way in all of the alternative schools.

VII. RECOMMENDATIONS

Alternative schools have proven their value. They should be nurtured and their experience considered as the school system addresses the continuing problem of failure and dropping out.

-- Traditional high schools which serve youngsters whose academic and social profiles resemble those of dropouts should be redesigned with reference to the alternative school model.

-- Given the importance of first semester performance, special efforts should be made in all schools to place entering students, particularly those most at-risk, in especially motivating classes with expert teachers.

-- Efforts should be made to engage those youngsters and their parents in activities which are critical to furthering the goals of the school.

-- Alternative schools appropriate for younger students should be available immediately following junior high school.

-- The school system should redouble its efforts to bring alternative schools' facilities and resources, particularly their vocational training capabilities, to par with other city schools.

-- Alternative schools which have not realized their full potential should be brought, through a concerted program

of staff development based on the principles suggested herein, to the level of excellence which characterizes their best efforts.

-- A strategic analysis of the various programs serving over-age, severely-underachieving students is required in order to develop program models with greater capability for seeing those students through to the completion of the diploma. Alternative schools which serve the most at-risk are the obvious testing grounds for such programs and should be used as laboratories for the school system.

APPENDICES

APPENDIX A: NOTES ON THE STATISTICAL TABLES

It is important to keep the following information in mind about the statistical tables in Sections I and II of this report.

Tests of Significance

Two different tests of significance are employed in this study. The first, a t-test, is used to determine whether a significant difference exists between two sample means (Tables I, II, IV, IX AND X). Being statistically significant means that the difference is probably not due to chance. In all of the tables, when the number in the column labelled "t" has two asterisks, the difference between the means could be due to chance less than one time out of one-hundred and where it has one asterisk, the difference could be due to chance less than five times out of one-hundred. Where there are no asterisks, it means the difference could be due to chance more than five times out of one-hundred and is not considered statistically significant.

The second significance test, the chi square, is used to find out if differences between proportions are statistically significant (Tables VI, VII, and VIII). When using chi square tests, more than two groups can be compared to each other. When the chi square test is applied, it tests whether the whole pattern

varies from what would be expected by chance. In all of the chi square tables, the use of asterisks follows the pattern described for t-tests.

Variations in the Numbers of Students Being Compared

The numbers of subjects, indicated by the notation "n=" varies from comparison to comparison. There are two primary reasons for the "shifting n's." First, in Tables I, II, IX, X, the n's get smaller as we move from semester 1 to semester 4 of the alternative school because an increasing number of students drop out, transfer, or graduate. The second major reason for changes in the n's is that students must be omitted whenever their record was lacking the data on which the comparison was made.

Negative Signs Indicating Direction of Differences

T values in the tables where differences between means are tested indicate not only whether or not the difference is significant, but also the direction of the difference. A minus in front of a t-value means that absences or credits have increased in the alternative school. A t-value that does not have a minus in front of it indicates that absences or credits have decreased.

Chi square numbers do not have a sign indicating the direction of differences. The direction of differences in chi square must be determined by looking at the actual proportions.

APPENDIX B: CALCULATIONS FOR DETERMINING WHICH SCHOOLS WILL GRADUATE THE AVERAGE STUDENT

In order to determine which schools would graduate their average student by the age of 21 we had to use several sets of calculations. First, we went back to the data from the initial phase of our research to find out the average number of credits with which students entered each of the eight alternative schools (See Foley & McConnaughy, 1982, p. 66). Then, using data on the average age of students when they entered each alternative school, we calculated the number of semesters remaining until the average student reached the age of 21. The third step was to multiply the number of semesters left by the average number of credits being earned in the alternative school. Finally, that number was added to the number of credits with which the students entered to determine the total projected credits by age 21. Table A on the next page shows those calculations.

TABLE A

PROJECTED NUMBER OF CREDITS EARNED BY THE AGE OF 21

	Total Credits Earned In Previous School	Semesters Left Until Age of 21	Average Credits Per Alternative School Semester	Projected Credits At Age of 21
Case Study Schools				
CITY-AS-SCHOOL (n=86)	19.9	8.2	4.61	57.70
REDIRECTION (n=44)	7.1	7.0	2.93	27.61
SATELLITE (n=27)	15.1	9.4	6.61	77.23
Other Schools				
BRONX REGIONAL (n=17)	5.2	9.2	2.92	32.06
MIDDLE COLLEGE (n=38)	9.9	11.0	4.29	50.99
PACIFIC (n=26)	10.9	7.0	2.39	27.63
PARK EAST (n=26)	6.6	10.2	3.46	41.89
WEST SIDE (n=33)	10.1	9.4	2.71	35.57

APPENDIX C: METHODS USED FOR INTERVIEWS

Selecting Interview Subjects

We attempted to interview a representative sub-group of persisters, dropouts, and transfers from each of the three case-study schools. Although we had hoped to select that sub-group randomly, this was only possible with persisters. Because they were difficult to locate, dropouts and transfers were selected in a different way. An attempt was made to contact every student who dropped out or transferred from the three case-study schools by means of four phone calls and two letters. All respondents were interviewed in order to come close to the desired proportion of dropouts and transfers. Table B (next page) shows the breakdown of the interviewees by school and status.

Persisters were interviewed in their school in June, 1983 before the close of the academic year. Three quarters of the dropouts and transfers were interviewed in PEA's offices in July and August and the rest were interviewed over the phone. Students who came to the PEA offices were given a $10 stipend.

The Questionnaire

Figure A (pp. 69-71) shows the questionnaire used for the student interviews.

TABLE B

PERCENTAGE OF ELIGIBLE PERSISTERS, DROPOUTS AND TRANSFERS INTERVIEWED

Case Study Schools	Persisters		Dropouts		Transfers	
	Eligible	Interviewed	Eligible	Interviewed	Eligible	Interviewed
CITY-AS-SCHOOL	60	5	28	5	15	4
REDIRECTION	24	8	14	4	10	3
SATELLITE	30	8	5	1	2	1

FIGURE A

ALTERNATIVE SCHOOL FOLLOW UP STUDY
INTERVIEW FORMAT

Name:_____ Code:_____

School Status:_____ School:_____
(active, transfer, dropout, senior)

A. Background Data

1. Date of Birth:_____ (month-day-year)
2. Race:_____
3. Sex:_____
4. No. of semesters at this school: _____
5. Do you live with your parents/ guardians?_____
6. No. of Siblings:_____
7. Do you have any children?_____
8. Who takes care of the baby?_____
9. Does the mother/father help you with the baby? _____

B. General Questionnaire

1. How many high schools have you attended? What brought you to_____? (name of high school)
2. How do/did you like_____? Why? Why not? (name of high school)
3. What are/were you learning? How does that fit in with your future plans?
4. Do/did you like the courses? Do/did you generally get the program you want? Do/did you have any academic problems? Do/did you pass most courses or only a few? Why did you pass/fail?
5. Do/did you like the feeling in the school? Does it or did it feel safe?

6. Tell me about the teachers. Are/were they friendly? Helpful? Do/did you have any serious conflicts with a teacher? Were you ever sent to the dean or suspended?

7. What are/were the students like? Friendly? Do/did you get into any fights?

8. Are/were there any extra-curricular activities? Do you participate? Why/Why not?

9. What does the school need to improve?

10. Do/did you attend _____ regularly? What kinds
(name of school)
of things keep/kept you home? Do you have family obligations that complicate your school attendance?

11. Do you/did you work while in school? How many hours/weeks? Do/did your parents/spouse expect you to contribute to the family income?

12. Do you plan to graduate? Did you plan to graduate when you were younger?

13. Do/did your parents expect you to graduate? How would they/do they feel about your dropping out?

14. What kind of work would you like to do? What kind of work would your parents like you to do? What kind of work do they do?

15. Do you want more education for yourself? Would you advise others to finish high school? Do you think it prepares you to make a better living?

C. Additional Questions for Dropouts

1. When did you drop out? Why? Did you have any particular health/family problems that year? Were you involved with alcohol or drugs? Any trouble with the law?

2. Did the school try to help? What did they do? Is there anything they could have done to make it possible for you to stay in school? If so, what?

3. What are you doing now? Would you finish high school if the means were available to you?

Please check any factor which played a role in your decision to leave school. Circle the most important factor.

a._____ Preferred work to school

b._____ Not interested in school

c._____ School was too hard

d._____ Doing failing work

e._____ Disliked a teacher/s

f._____ Disliked a subject/s

g._____ Could learn more outside of school

h._____ Needed money to help at home

i._____ Needed or wanted spending money

j._____ Ill health

k._____ Friends had left school

l._____ Parents wanted me to leave school

m._____ Expelled

n._____ Marriage

o._____ Pregnancy

p._____ Do not know

APPENDIX D: CALCULATIONS FOR DETERMINING EXPECTED AND ACTUAL PERSISTENCE RANKS AND ACTUAL CREDIT RANKS OF THE ALTERNATIVE SCHOOLS

In order to determine the expected persistence rank of a school (See Table XIII, p. 44) we used the four characteristics of alternative school entrants which statistically distinguished the eventual persisters from dropouts: age upon entrance into the alternative school, admission status (transfer, truant, or dropout), absences in the last year of the traditional high school, and credits earned in the last year of the traditional high school. As there were eight schools in the sample, when making assignments, a school received a rank from one to eight on each of these measures. The greater the expectation for persistence, the higher the rank indicated. For example, a school with young students would receive a high rank for age because younger students tend to persist. It would receive a low rank for absences if its students had many absences in the last year of traditional school because poor attendance in the previous school is associated with dropping out of an alternative school. After each school had been given an expected persistence rank on each of the four measures, the ranks were added together and divided by four to yield the "average" expected persistence rank. See Table C, next page, for these calculations.

In order to determine the actual persistence rank of a school (See Table XIII, p. 44) we first had to determine the proportion

TABLE C

CALCULATIONS FORMING THE BASIS FOR
EXPECTED PERSISTANCE RANKS
OF THE ALTERNATIVE SCHOOLS

School	Age in 1981		Admission Status (% truant + % dropout)		Previous Absences		Previous Credits		Average Rank (= Expected Persistence Rank)
	Raw Data	Rank	Raw Data	Rank	Raw Data	Rank	Raw Data	Rank	
Case Study Schools									
CITY-AS-SCHOOL	16.9 yr.	3	46%	6	26.15	6	3.10	7	5.5
REDIRECTION	17.5 yr.	1.5	87%	2	40.10	1	.72	1	1.4
SATELLITE	16.3 yr.	5	65%	3.5	28.58	6	2.12	5	4.8
Other Schools									
BRONX REGIONAL	16.4 yr.	5	92%	1	25.67	6	1.02	2	3.6
MIDDLE COLLEGE	15.4 yr.	8	0%	8	9.44	8	4.89	8	8
PACIFIC	17.5 yr.	1.5	67%	3.5	32.70	3	1.61	3	2.8
PARK EAST	15.9 yr.	7	36%	7	33.93	3	2.21	5	5.5
WEST SIDE	16.3 yr.	5	52%	5	35.55	3	2.33	5	4.5

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of persisters in each school. We then assigned a rank from one to eight to that proportion, with high ranks being given to schools with high proportions of persisters (See Table D, p. 75) for these calculations.

In order to determine the actual credit rank (See Table XIV, p. 46) we calculated the average credits earned per semester across the four semesters studied. Ranks were assigned to the average credits for four semesters in each school. Higher numbers of credits received higher ranks (See Table E, p.76).

TABLE D

CALCULATIONS FORMING THE BASIS FOR ACTUAL PERSISTENCE RANK OF THE ALTERNATIVE SCHOOLS

School	Percentage of Persisters (Actives plus Graduates)	Rank
Case Study Schools		
CITY-AS-SCHOOL	45.9	4
REDIRECTION	40.4	2
SATELLITE	76.6	7.5
Other Schools		
BRONX REGIONAL	44.4	3
MIDDLE COLLEGE	75.0	7.5
PACIFIC	38.4	1
PARK EAST	68.8	6
WEST SIDE	54.6	5

TABLE E

CALCULATIONS FORMING THE BASIS FOR CREDIT RANK OF THE ALTERNATIVE SCHOOLS

Schools	Average Credits Earned	Rank
Case Study Schools		
CITY-AS-SCHOOL	4.61	7
REDIRECTION	2.93	3.5
SATELLITE	6.61	8
Other Schools		
BRONX REGIONAL	2.92	3.5
MIDDLE COLLEGE	4.29	6
PACIFIC	2.39	1
PARK EAST	3.46	5
WEST SIDE	2.71	2

APPENDIX E: VARIABLES ON WHICH PERSISTERS AND DROPOUTS WERE COMPARED

Performance in Alternative School

Absences in 1st semester - 4th semester	Number of days absent in each of the first four semesters of the alternative school.
Credits Earned in 1st semester - 4th semester	Number of credits earned in each of the first four semesters of the alternative schools.

Performance in Previous School

Admission Status -	There are three statuses. A student comes in either as a transfer from the traditional school with no noticeable pattern of absences, a truant who was enrolled but had more than 30 absences per semester or a dropout who had quit school altogether.
Last Reading Score -	Score on the last standardized reading test when taken in the previous school.
Last Math Score -	Score on the last standardized math test when taken in the previous school.
Absences in the Last Two Semesters -	Average number of absences in last two semesters of previous high school.
Credits Earned in the Last Two Semesters of High School -	Average credits earned in the last two semesters in previous high school.

Demographic Data

Age Upon Entrance -	Age of student upon entrance into the alternative school.
Sex -	Male or Female